

CALIFORNIA ENVIRONMENTAL QUALITY ACT

SPECIAL INITIAL STUDY

The Department of Toxic Substances Control (DTSC) has completed the following Special Initial Study for this project in accordance with the California Environmental Quality Act (§ 21000 et seq., California Public Resources Code) and implementing Guidelines (§15000 et seq., Title 14, California Code of Regulations). This Special Initial Study has also been used to satisfy the requirements of 711.4, Fish and Game Code and 753.5, Title 14, Code of California Regulations relating to filing of environmental fees.

I. PROJECT INFORMATION

Project Name:

Non-Time Critical Removal Action at Solid Waste Management Unit (SWMU) 24 – Stationary Demilitarization Furnace, Naval Weapons Station (NAVWPNSTA) Seal Beach, California.

Site Location:

NAVWPNSTA Seal Beach is located at 800 Seal Beach Boulevard, Seal Beach, California, and consists of approximately 5,000 acres of land along the Pacific Ocean within the city of Seal Beach. NAVWPNSTA Seal Beach is bordered on the southwest by Anaheim Bay, on the north by Interstate Highway 405 (San Diego Freeway), on the east by Bolsa Chica Road, on the west by Seal Beach Boulevard, and on the southeast by an Orange County Flood Control Channel (as shown on Figure 1).

SWMU 24 is a rectangular 0.69 acre area, which is approximately 160' x 190'. SWMU 24 is the site of the former stationary demilitarization furnace facility (SDFF). SWMU 24 is located in the explosive storage area approximately 330 feet south of Westminster Street and east of Building 95 (as shown on Figure 2).

Contact Person/ Address/ Phone Number:

Pei-Fen Tamashiro
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Seal Beach, California 90740-5000

Project Description:

The Department of the Navy (DON) is proposing to excavate, remove, and dispose of approximately 450 bank cubic yards (bcy) of lead-impacted soil from SWMU 24, Stationary Demilitarization Facility, NAVWPNSTA Seal Beach. The project is expected to begin in late August or early September of 2002 and is anticipated to last approximately four to six weeks.

There are currently no buildings within SWMU 24 although Building 95 is approximately 50 feet to the west. SWMU 24 is a flat area that is mostly bare soil and gravel, with ruderal vegetation reinvading the site. Nonnative grasses typical of other developed areas at NAVWPNSTA Seal Beach are beginning to grow there. The area offers limited habitat of poor quality (little vegetation) because of the gravel fill that covers much of the area. SWMU 24 is not frequented by station personnel. The land use would be unrestricted.

The removal action planned for SWMU 24 involves complete removal of soil containing lead concentrations above the cleanup goal of 500 mg/kg. Excavation and removal of the contaminated soil would be performed using standard construction equipment (e.g., backhoes and front-end loaders). Contaminated soil would be excavated between 1 to 2 feet bgs, although the actual excavation depth would be determined depending upon confirmation sampling results.

Excavated soil would be stockpiled on and covered with plastic (minimum 20-millimeter thickness) until it can be sampled and classified for appropriate disposal. Also the trucks hauling the contaminated soil may be covered with tarps and their load height limited as necessary. Although not expected to be necessary, dust monitoring would be initiated if considered necessary. It is not anticipated that excavation activities would be required near Building 95.

Potential exposure and protection procedures for workers engaged in construction activities would be addressed in the site-specific safety and health plan. During excavation activities, measures would be taken to reduce fugitive dust emissions, if encountered, and the associated impacts on workers. All workers within the work zone would wear appropriate safety equipment and take appropriate safety measures.

Heavy equipment would conform to California Occupational Safety and Health Administration (OSHA) specifications. Excavation areas, soil stockpile areas, and other work areas would be properly delineated to limit access to authorized personnel. Only authorized and trained personnel would operate the heavy equipment.

Confirmation sampling would be performed to establish concentrations of lead for soil remaining in place after excavation has been completed. Analytical results from confirmation sampling would be compared to the proposed cleanup goal. Based on this comparison, a decision to terminate excavation, if feasible, would be made. Additional confirmation sampling would be required if the decision were made to continue excavation.

When the results of the confirmation sampling analyses indicate that the soil containing lead at concentrations exceeding the proposed cleanup goal has been removed, the excavation would be backfilled with clean fill material and compacted to original grade. The site would be allowed to naturally return to its prior condition, which is mostly bare soil and gravel, with ruderal vegetation.

Project Background Discussion

The SDFF was developed for processing small munitions items (e.g., small arms ammunition, fuses, cartridge actuated devices), destroying the small quantity of reactive explosive or propellant that could not feasibly be recovered, while reclaiming the relatively large volume of valuable recyclable metals. Small arms munitions, the major workload for the furnace, did not meet the reactive hazardous classification because of their designation as a Class C explosive (Kearney 1989).

The Former SDFF consisted of:

- An oil-fired steel firebox furnace, constructed of American Society for Testing and Materials 212 Grade B firebox quality steel;
- A heat recovery unit with asbestos gaskets;
- A conveyor system that consisted of feed conveyor, a discharge conveyor, a water cooling conveyor, and an inspection conveyor;
- An emission control system, which included a dust collector with a walk-in clean air plenum (baghouse), a cyclone separator, a draft induction fan with housing, a sampling

platform, and connecting duct work (conduit);

- An electrical transformer;
- A steel-reinforced concrete explosion barrier (blast wall);
- A metal operator building (former Building 97) that contained a concrete block control room with a control console;
- A concrete block/wood operations support building (former Building 79) that contained an office and shower changing area;
- Two steel-reinforced aboveground storage bunkers;
- A paint storage locker;
- A steel-reinforced concrete foundation;
- A bermed concrete contained area (with sump) that surrounded the furnace;
- A network of steel-reinforced concrete slabs; and
- An asphalt access road.

The entire site was enclosed by an eight-foot chain link fence equipped with three strands of barbed wire (Foster Wheeler 1999).

During operation of the facility the waste (kiln dust and sludge) was temporarily stored in 55-gallon, Department of Transportation-approved drums at the SDFF prior to disposal at a permitted off-station facility. If storage of the waste for over 90 days was required, then the waste was transported from the SDFF to a permitted hazardous waste storage facility at NAVWPNSTA Seal Beach. The processing of expended munitions generated waste material containing hazardous concentrations of metals; therefore, it was disposed as a hazardous waste when removed from the facility. On a quarterly basis, a maximum of approximately 3,000 pounds of hazardous waste was stored at the facility (CH2M Hill 2000).

In 1998, Foster Wheeler Environmental Corporation (Foster Wheeler) decommissioned the SDFF at SWMU 24. Following demolition of the facility, at the DON's request, Foster Wheeler collected soil samples from the surface soil in and around the areas where structures had been located. One sample was collected from a random location within each of the 16 sampling grids at a depth of 3 inches below ground surface (bgs) (Foster Wheeler 1999).

The Sampling results showed that 13 of the 16 sampling grids contained at least one constituent that exceeded the respective station wide upper limit background value (ULBV) for metals in soil at NAVWPNSTA Seal Beach. Lead was reported in excess of the ULBV in 12 of the 16 grids sampled, at concentrations of up to 1,200 mg/kg. Copper was reported in 5 of 16 samples at concentrations exceeding the ULBV. Cadmium was reported in 4 of the samples at concentrations exceeding the ULBV. Selenium and mercury were each reported in one sample at a concentration exceeding their respective ULBV (Foster Wheeler 1999).

In 2000, CH2M Hill conducted a focused site inspection (FSI) Phase II at SWMU 24. The objective of the FSI Phase II was to assess the extent of metals to screen for ecological and human-health risks. The results and conclusions were as follows.

- Seven metals (cadmium, copper, lead, mercury, nickel, selenium, and zinc) were

reported at concentrations above the ULBVs. Lead and copper were the most frequently reported metals above ULBVs. Most of the metals above ULBVs were predominantly reported in surface soil samples.

- The human-health risk screening performed during the FSI concluded that there were minimal risks from metals at the site, the excess lifetime cancer risk (ELCR) estimated based on 5 percent upper confidence limit (UCL) concentrations of metals was 1×10^{-8} and the noncancer hazard index (HI) was determined to be 1.
- Based on the ecological risk screening, ecologically significant risks to terrestrial receptors exist from metal in the soil. Safe ecological preliminary remediation goals (PRGs) for most receptors were exceeded by the maximum concentrations of these metals and by the arithmetic mean concentrations of lead.

As a result, removal action was recommended in the FSI for SWMU 24. Significant risks to terrestrial ecological receptors from exposure to soil were the primary basis for this recommendation.

Agencies Having Jurisdiction Over the project/ Types of Permits Required:

The Department of the Navy, Southwest Division Naval Facilities Engineering Command (SWDIV), administers the Installation Restoration (IR) Program at NAVWPNSTA Seal Beach. The California Environmental Protection Agency (Cal/EPA) Department of Toxic Substances Control (DTSC) provides regulatory oversight for IR Program activities. DTSC, as lead agency, has approval authority over the RAW for this project. The activities planned for SWMU 24 will be conducted under the Navy's IR Program, pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. §9601, et seq. As such, the Navy is exempt from all federal, state, and local administrative requirements such as permit acquisition, administrative reviews, reporting, and record-keeping that would otherwise pertain to such activities.

II. DISCRETIONARY APPROVAL ACTION BEING CONSIDERED BY DTSC

- | | |
|--|---|
| <input type="checkbox"/> Initial Permit Issuance | <input type="checkbox"/> Removal Action Plan |
| <input type="checkbox"/> Permit Renewal | <input checked="" type="checkbox"/> Removal Action Workplan |
| <input type="checkbox"/> Permit Modification | <input type="checkbox"/> Interim Removal |
| <input type="checkbox"/> Closure Plan | <input type="checkbox"/> Other (Specify) |
| <input type="checkbox"/> Regulations | _____ |

Program/ Region Approving Project:

California Environmental Protection Agency (Cal/EPA), Department of Toxic Substances Control (DTSC), Office of Military Facilities – Southern California Operations.

Contact Person/ Address/ Phone Number:

Ms. Katherine Leibel
Office of Military Facilities
Department of Toxic Substances Control
5796 Corporate Avenue

III. ENVIRONMENTAL RESOURCES POTENTIALLY AFFECTED

The boxes checked below identify environmental resources, which were found in the following ENVIRONMENTAL SETTING/IMPACT ANALYSIS section to be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact".

- | | | |
|--|--|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Population and Housing |
| <input type="checkbox"/> Agricultural Resources | <input type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Transportation and Traffic |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Noise | <input type="checkbox"/> Utilities and Service Systems |
| <input type="checkbox"/> Geology And Soils | | <input type="checkbox"/> Cumulative Effects |
| <input type="checkbox"/> Hazards and Hazardous Materials | | |

IV. ENVIRONMENTAL IMPACT ANALYSIS

The following pages provide a brief description of the physical environmental resources that exist within the area affected by the proposed project and an analysis of whether or not those resources will be potentially impacted by the proposed project. Preparation of this section follows guidance provided in DTSC's California Environmental Quality Act Initial Study Workbook [Workbook]. A list of references used to support the following discussion and analysis are contained in Attachment A and are referenced within each section below.

Mitigation measures which are made a part of the project (e.g: permit condition) or which are required under a separate Mitigation Measure Monitoring or Reporting Plan which either avoid or reduce impacts to a level of insignificance are identified in the analysis within each section.

1. Aesthetics

Project activities likely to create an impact:

- Excavate lead-impacted soil
- Remove lead-impacted soil
- Dispose of lead-impacted soil

Description of Environmental Setting:

SWMU 24 is a rectangular, 160 by 190-foot, 0.69-acre area located near the center of NAVWPNSTA Seal Beach and site of the former SDFF. This area is now predominately flat and

covered with loose soil, gravel fill and some ruderal vegetation. The surrounding area is agricultural; no residences exist in the surrounding area. The area is not considered to be a scenic vista or resource.

Reference: 1 and 3.

Analysis of Potential Impacts:

Planned activities at the site include removal of approximately 450 bcy of lead-impacted soils, stockpiling of soils, and restoration of the site to its original state. Excavation of soil will occur over a 0.69-acre area and will be limited to the top 2 feet of soil. The project will not result in the addition of new light and/or glare; and will not block any views, or obstruct any scenic vista or view open to the public.

Therefore the project will not:

- a. Have a substantial adverse effect on a scenic vista.
- b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway.
- c. Substantially degrade the existing visual character or quality of the site and its surroundings.
- d. Create a new source of substantial light of glare, which would adversely affect day or nighttime views in the area.

References: 1 and 3

Findings of Significance:

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☐ Less Than Significant Impact
- ☒ No Impact

2. Agricultural Resources

Project activities likely to create an impact:

- Excavate lead-impacted soil
- Remove lead-impacted soil
- Dispose of lead-impacted soil

Description of Environmental Setting:

Historically the project area was used for manufacturing small arms. Although no agriculture exists on the site the area is surrounded by agricultural activities.

Analysis of Potential Impacts:

The site is not agricultural. The project is temporary and all activities will be performed on site, therefore no impact is expected to the surrounding agricultural land.

Therefore the project will not:

- a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.
- b. Conflict with existing zoning or agriculture use, or Williamson Act contract.
- c. Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural uses.

References:

Findings of Significance:

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☐ Less Than Significant Impact
- ☒ No Impact

3. Air Quality

Project activities likely to create an impact:

- Excavate lead-impacted soil
- Remove lead-impacted soil
- Dispose of lead-impacted soil

Description of Environmental Setting:

The climate at NAVWPNSTA Seal Beach is largely influenced by the Pacific high, which is a semi permanent high-pressure system located off the Pacific Coast that tends to migrate seasonally. During the summer, the high-pressure system moves northerly and produces persistent temperature inversions and predominantly northwest airflow. Skies remain clear, and little precipitation occurs because the high-pressure system tends to block migrating extra-tropical storms. Warm, moist tropical air from off the coast of Mexico also blows into southern California, bringing occasional thunderstorms and isolated showers that occur mainly over the mountains.

The Pacific high begins to shift southerly during the fall, and its effects are less pronounced, especially during the winter. Extra-tropical storms can move into southern California, increasing precipitation and cooling temperatures. During the winter, Santa Ana wind conditions are not uncommon. Santa Ana winds occur when high pressure builds in the Great Basin area of Utah and Nevada. The clockwise circulation around the high-pressure system produces north to northeast winds, which can persist from several hours to a few days and reach sustained speeds of up to 60 miles per hour (mph).

Seal Beach climate is classified as a marine-influenced southern California coastal region with

mild winters that average 52 degrees Fahrenheit (°F) and summers that average 68°F. Air temperature extremes range from winter lows in the 30s to summer highs in the 90s. Annual precipitation averages 12.5 inches with approximately 90 percent occurring between the months of November and April. Although precipitation is low, a high humidity level is sustained owing to the proximity of the Pacific Ocean.

Prevailing winds at NAVWPNSTA Seal Beach average 3.8 mph from the west. Occasional strong, dry winds of up to 60 mph from the northeast occur in the fall, winter, and early spring due to Santa Ana conditions.

The table below shows the maximum concentration of chemical constituents found in the soil at SWMU 24, the calculated maximum concentration of each constituent in the air based on an assumed maximum dust concentration of 5 mg/m³, and the maximum allowable concentration of each constituent permitted by OSHA, i.e., the PEL.

Chemical Compound	Max. Conc. in Soil ⁽¹⁾ (mg/kg)	Max. Conc. in Air ⁽²⁾ (mg/m ³)	Max. Allowable Conc. in Air ⁽³⁾ (mg/m ³)
Metals			
Aluminum	3.0E+04	1.50E-01	5.0E-00
Antimony	1.2E+02	5.75E-04	5.0E-01
Arsenic	6.4E+00	3.20E-05	1.0E-02
Barium	1.4E+03	6.95E-03	5.0E-01
Beryllium	1.0E+00	5.00E-06	2.0E-03
Cadmium	5.3E+02	2.63E-03	5.0E-03
Chromium	3.6E+01	1.80E-04	1.0E-00
Cobalt	1.5E+01	7.50E-05	1.0E-01
Copper	1.1E+03	5.55E-03	1.0E-00
Lead	4.1E+03	2.03E-02	5.0E-02
Manganese	7.7E+02	3.86E-03	5.0E-00
Mercury	5.6E-01	2.80E-06	1.0E-01
Molybdenum	6.2E+00	3.10E-05	1.5E+01
Nickel	3.6E+01	1.80E-04	1.0E-00
Selenium	3.9E+00	1.95E-05	2.0E-01
Silver	3.0E+00	1.50E-05	1.0E-02
Thallium	1.9E+00	9.50E-06	1.0E-01
Vanadium	7.0E+01	3.50E-04	5.0E-01
Zinc	1.1E+03	5.65E-03	5.0E-00

Notes:

- (1) Maximum concentrations reported in SWMU 24 soils (Focus Site Inspection Phase II Report, Table 5-11).
- (2) Maximum concentrations in air based on an OSHA permissible exposure limit (PEL) for exposure to dust (based on an 8-hour shift) of 5 mg/m³.
- (3) Maximum allowable concentration permitted by OSHA (Ref. NIOSH Pocket Guide to Chemical Hazards, June 1997).

References: 1, 3, 6 and 15.

Analysis of Potential Impacts:

Excavation activities may create *temporary* airborne particulates and fugitive dust, which will cease once the field activities are complete. The main potential air emissions generated by this project would be fugitive dust. The greatest amount of emissions will occur during excavation and stockpiling which is expected to last for approximately 4 to 8 weeks.

Dust emissions will be controlled by water spraying during excavation and stockpiling activities. The air will be monitored for particulates to ensure compliance with the substantive requirements of the South Coast Air Quality Management District (SCAQMD) Rules 401(b)(1)(A), and 403. The air will be monitored for dust upwind and downwind of the site to determine the dust emissions generated by the excavation. In the event significant dust is produced by the excavation or the stockpiles, excavation will be halted and the excavation area or stockpiles will be sprayed with water and/or covered with plastic, as appropriate.

The potential exposure of site workers and the public to chemical constituents present in the soil is through the inhalation of dust. According to Occupational Safety and Health Administration (OSHA), the permissible exposure limit (PEL) for workers (based on an 8-hour shift) is 5 milligrams per cubic meter (mg/m³) for dust. To be more protective of public health and the environment, total dust emissions will be monitored and if found to exceed 1 mg/m³, dust suppression measures (e.g., water spraying, covering of stockpiles) will be implemented.

Using the average wind speed for NAVWPNSTA Seal Beach of 3.8 mph, as described above, a soil moisture content of 15 percent by weight, handling a maximum of 500 tons (1,000,000 pounds [lbs]) of soil per day, and no dust suppression measures, the project is expected to generate approximately 15 pounds per day of PM₁₀ emissions due to soil handling operations. The SCAQMD considers a project to have a significant impact on air quality if the projected dust emissions are greater than 150 pounds per day. The SCAQMD CEQA Handbook, Table 9-9-G provides the following equation for calculating dust (PM₁₀) emissions from soil handling operations:

$$E = 0.00112 \times \{(G/5)^{1.3} / (H/2)^{1.4}\} \times I/J$$

where:

- E = PM₁₀ emissions from dirt piling or material handling operations
- G = wind speed (average 3.8 mph)
- H = soil moisture content (15 percent by weight, H = 0.15)
- I = pounds of soil handled per day (1,000,000 lbs/day)
- J = 2,000 (conversion from tons of soil to pounds of soil)

The project will also generate vehicle exhaust emissions, including carbon monoxide (CO), volatile organic compounds (VOCs), nitrogen oxides (NO_x), sulfur oxides (SO_x), and particulate matter with an aerodynamic diameter smaller than or equal to 10 microns (PM₁₀).

Approximately 8 additional vehicles will enter and leave NAVWPNSTA Seal Beach each day in support of this project. Earth moving equipment is expected to operate approximately 8 hours per day for 25 days. Approximately 2 truck trips per day will be required for hauling excavated materials off-site. The following is an estimate of the exhaust emissions associated with this temporary increase in vehicular traffic.

MAXIMUM EXHAUST EMISSIONS (lbs/day) *				
CO	VOC	NO _x	SO _x	PM ₁₀

13.22	1.80	29.26	2.56	2.08
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- * The emissions have been estimated using the worst-case assumption that all equipment operates simultaneously for the life of the project.

These temporary emissions are below SCAQMD thresholds of 550 lbs/day CO, 55 lbs/day VOC, 55 lbs/day NO_x, 150 lbs/day SO_x, and 150 lbs/day PM₁₀.

Chemical constituents present in the soil and dust are not potential ozone-depleting gases or potential heat-regenerative gases. The project is not in a confined space so any dust generated by the project will disperse and will not displace oxygen to any level of significance. Even if the dust concentration reaches the maximum allowable concentration of 1 mg/m³, the concentration of contaminants will still be well below the OSHA standard (5 mg/m³).

The size and nature of the project is too small to alter air movement, moisture, temperature or result in any changes in climate, either locally or regionally. The short duration of the project and the low level of contaminants emitted to the air will prevent any degradation of any air resources which would individually or cumulatively result in a loss of biological diversity among the plants and animals residing in that air.

Therefore the project will not:

- Conflict with or obstruct implementation of the applicable air quality plan.
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
- Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- Expose sensitive receptors to substantial pollutant concentrations.
- Create objectionable odors affecting a substantial number of people.

In addition, the following are addressed to meet the requirements set forth under Section 711.4, Fish and Game Code and 753.5, Title 14, Code of California Regulations relating to filing of environmental fees:

- Degradation of any air resources, which will individually or cumulatively result in a loss of biological diversity among the plants and animals residing in that air.

References: 1,3,6 and 7

Findings of Significance:

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☒ Less Than Significant Impact
- ☐ No Impact

4. Biological Resources

Project activities likely to create an impact:

- Excavate lead-impacted soil
- Remove lead-impacted soil
- Dispose of lead-impacted soil

Description of Environmental Setting:

Ecological receptors at SWMU 24 are limited because of the recent demolition activity and limited vegetative habitat. SWMU 24 is a flat area that is mostly bare soil and gravel, with ruderal vegetation reinvading the site. The mourning dove, California ground squirrel, and American kestrel are all commonly observed on maintained grassy areas near NAVWPNSTA Seal Beach and may occasionally occur at the site. Nonnative grasses typical of other developed areas at NAVWPNSTA Seal Beach are beginning to grow there. Areas of nonnative grass surround the site and substantial agricultural areas are located to the south and east.

Based on the ecological risk screening, ecologically significant risks to terrestrial receptors exist from metals in the soil. Eight metals (antimony, cadmium, copper, lead, mercury, nickel, selenium, and zinc) identified at the site were described as presenting potentially unacceptable ecological risk. Lead was considered the primary concern. The ecological risk assessment identified several PRGs for lead as a screening benchmark for plants, wildlife, soil invertebrates, and soil microbes. The risk assessment recommended the PRG of 500 mg/kg, based on a screening benchmark value for soil invertebrates, as the cleanup goal for the site because earth worms and other soil invertebrates are food items for other wildlife receptors. Wildlife receptors of potential concern were identified as the mourning dove, California ground squirrel, American kestrel, American robin, raccoon, and the red fox.

Because of the distance of SWMU 24 to the nearest surface water body and the depth to the groundwater table, exposure to aquatic receptors is not considered at this site.

References: 1 and 3.

Analysis of Potential Impacts:

The purpose of the project is to remove soils contaminated with metals that may be hazardous to wildlife and humans. Therefore long term impacts to the environment from the project will be beneficial.

Because recent activities have disturbed the site, the site remains mostly void of vegetation. No riparian or sensitive habitat, including wetlands, marshes, or any water bodies, exists on the site. The project may result in the removal of some nonnative grasses that are beginning to grow at the site as well as ruderal vegetation occurring at the site. The impacted areas will be allowed to naturally revegetate after the removal action is complete.

Because the site has little vegetation it does not offer cover, nesting or foraging opportunities for small animals identified in the surrounding area. Impacts to animals are expected to be minimal because the project site covers only 0.69 acres of a large open space area and the duration of the project is only 4 months. Any small animals are expected to leave the site due to noise and excavation activities.

A review of the California Fish and Game Rarefind database in July of 2002 did not identify any protected, endangered, or threatened plant and animal species.

Therefore the project will not:

- a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- e. Conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- e. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

In addition, the following are addressed to meet the requirements set forth under Section 711.4, Fish and Game Code and 753.5, Title 14, Code of California Regulations relating to filing of environmental fees:

Plants:

- Changes to any riparian land or wetlands under state or federal jurisdiction.
- Changes to soil required to sustain habitat for fish and wildlife.
- Any adverse effect to native and non-native plant life.
- Effects to rare and unique plant life and ecological communities dependent on plant life.
- Any adverse effect to listed threatened and endangered plants.
- Effects on habitat in which listed threatened and endangered plants are believed to reside.
- Effects on species of plants listed as protected or identified for special management in the Fish and Game Code, the Public Resources Code, the Water Code, or regulations adopted thereunder.
- Effects on marine and terrestrial plant species subject to the jurisdiction of the Department of Fish and Game and ecological communities in which they reside.

Animals:

- Effects on listed threatened or endangered animals.
- Effects on habitat in which listed threatened or endangered animals are believed to reside.
- Effects on species of animals listed as protected or identified for special management in the Fish and Game Code, the Public Resources Code, the Water Code, or regulations adopted thereunder.
- Effects on marine and terrestrial animal species subject to the jurisdiction of the Department of Fish and Game and the ecological communities in which they reside.

References: 1 and 3

Findings of Significance:

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☐ Less Than Significant Impact
- ☒ No Impact

5. Cultural Resources

Project activities likely to create an impact:

- Excavate lead-impacted soil
- Remove lead-impacted soil
- Dispose of lead-impacted soil

Description of Environmental Setting:

On December 28, 1999, the DON issued a letter to the State Historic Preservation Officer (SHPO), which included a figure showing the area of potential effect (APE) for collecting soil, and groundwater samples at multiple sites, including SWMU 24, at NAVWPNSTA Seal Beach overlaid with known archaeological sites (Ref. 12). The APE for the proposed soil sampling at SWMU 24 did not appear to overlay any archaeological sites. Based on this, a determination of *proposed conditional no adverse effect* was agreed upon by the DON and SHPO (Ref. 13). In accordance with the conditions of this determination, an archaeological services report relative to sampling at these sites was prepared (Ref. 14). The archaeological services report documented instructions given to sampling personnel in the recognition of archaeological materials, and archaeological and Native American monitors were on call during the sampling. The report presented findings that no cultural resources were encountered during the project and made the recommendation that no further cultural resources research is required for the 13 sampling areas, including SWMU 24. It was recommended that there is no requirement for cultural resources monitoring during any remedial actions that may occur as a result of the sampling, so long as the remedial action is confined to the areas that were sampled.

References: 1, 12, 13, and 14.

Analysis of Potential Impacts:

The APE for the proposed soil sampling at SWMU 24 did not appear to overlay any

archaeological sites (Ref 12) and no cultural resources were identified during the FSI Phase II (Ref 14). Intrusive sampling at SWMU 24 conducted during the FSI Phase II did not reveal the presence of any cultural resources. It is, therefore, reasonable to conclude that cultural resources are not present at SWMU 24, and that the removal action can proceed without further evaluation. If cultural resources are observed during excavation, the Navy will halt the removal action, and will inspect and evaluate the findings in consultation with SHPO.

Therefore the project will not:

- a. Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5.
- b. Cause a substantial adverse change in the significance of an archeological resource pursuant to 15064.5.
- c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
- d. Disturb any human remains, including those interred outside of formal cemeteries.

References: 1, 12, 13 and 14

Findings of Significance:

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☐ Less Than Significant Impact
- ☒ No Impact

6. Geology and Soils

Project activities likely to create an impact:

- Excavate lead-impacted soil
- Remove lead-impacted soil
- Dispose of lead-impacted soil

Description of Environmental Setting:

NAVWPNSTA Seal Beach is bordered to the southwest by Anaheim Bay and to the north, east, and west by highly developed urban communities. Most of NAVWPNSTA Seal Beach lies on relatively flat alluvial deposits that slope evenly from approximately 20 feet above sea level in the northeastern part of the facility, to sea level in the tidal salt marsh of the Seal Beach National Wildlife Refuge (NWR) in the southwest. The most pronounced topographic feature on NAVWPNSTA Seal Beach is part of Landing Hill on the southwest side of the facility. Landing Hill is an uplifted area along the Newport-Inglewood Fault Zone that covers an area extending west of NAVWPNSTA Seal Beach across Seal Beach Boulevard. Landing Hill reaches a maximum elevation of about 50 feet above sea level on the facility.

NAVWPNSTA Seal Beach is located adjacent to the Pacific Ocean at the seaward edge of the Orange County Coastal Plain at the northwest corner of Orange County, California. The northwest-trending Newport-Inglewood structural zone (NISZ) underlies the southwestern half of

NAVWPNSTA Seal Beach. The NISZ consists of a complex set of faults and folds that extend from Newport Beach approximately 10 miles southeast of NAVWPNSTA Seal Beach to Beverly Hills at the base of the Santa Monica Mountains, approximately 30 miles northwest of the Station. Uplift along the NISZ has produced a line of low coastal hills and mesas near the southern end, including Landing Hill along the west edge of NAVWPNSTA Seal Beach. Adjacent to Landing Hill on the east is Sunset Gap, a wetland comprising coastal salt marsh and tidal mud flats.

SWMU 24 is part of Operable Unit 7. SWMU 24 is located near the center of NAVWPNSTA Seal Beach and is the site of the former SDFF. The SDFF was used primarily from 1985 to 1994 for the removal of explosive residue from expended munitions and was decommissioned in 1998. The site is located approximately 330 feet south of Westminster Street. The site is bounded on the west by Building 95 and on the east and south by agricultural fields.

NAVWPNSTA Seal Beach soils typically contain abundant clay and silt and are poorly drained. Six soil types (Alo clay, Beaches, Bolsa silt loam, Bolsa silt clay loam, Myford sandy loam, and tidal flats) have been identified at the station (Ref 2). The soil at SWMU 24 is predominantly fine-grained (i.e., silts and clays) (Ref 1). Groundwater is expected to be approximately 21 feet below ground surface (bgs) (Ref 1).

References: 1 and 2.

Analysis of Potential Impacts:

Unstable earth conditions are not expected at this site during excavation activities. Soil will be excavated in lifts until all soil containing lead concentrations above the clean-up goal of 500 mg/kg have been removed. Contaminated soil will be excavated to between 1 and 2 feet bgs in most cases and to approximately 3 feet bgs in areas where necessary. Excavation will continue if analytical results of confirmation samples indicate that soil containing lead concentrations above the clean-up goal remains. Following excavation, clean backfill will be used to restore the affected area to a condition comparable with surrounding area conditions. The site will be allowed to naturally revegetate.

Excavations will be cut vertically. In the unlikely occurrence that the extent of lead-impacted soils requires an excavation deeper than 5 feet, the walls of the excavation will be sloped with a ratio of 1.5 feet horizontal to 1.0 foot vertical and will require notification to the California Occupational Safety and Health Administration (Cal/OSHA). All excavations will be conducted in accordance with California Health and Safety Code, California Code of Regulations (CCR), Title 8, Sections 1539 through 1541, and Title 29, Code of Federal Regulation (CFR), Sections 1910 and 1926. Daily inspections of excavations by a competent person will also be performed to assess the stability of the slopes and excavated areas. Following excavation, clean backfill will be used to restore the affected area to a condition comparable with surrounding area conditions, and the site will be allowed to naturally revegetate.

The project will reduce the risk to ecological receptors from lead-impacted soils.

Therefore the project will not:

- a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42)

- Strong seismic ground shaking
 - Seismic-related ground failure, including liquefaction
 - Landslides
- b. Result in substantial soil erosion or the loss of topsoil.
- c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.
- d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.
- e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of water.

References: 3, 4, and 5

Findings of Significance:

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☒ Less Than Significant Impact
- ☐ No Impact

7. Hazards and Hazardous Materials

Project activities likely to create an impact:

- Excavate lead-impacted soil
- Remove lead-impacted soil
- Dispose of lead-impacted soil

Description of Environmental Setting:

The human-health risk screening performed during the FSI concluded that there were minimal risks from metals at the site, the Excess Lifetime Cancer Risk (ELCR) estimated based on 95 percent Upper Confidence Limit (UCL) concentrations of metals was 1×10^{-8} and the noncancer Hazard Index (HI) was determined to be 1.

NAVWPNSTA Seal Beach is a fenced installation and does not allow unescorted public access onto the Station. SWMU 24 is located near the center of the station, 330 feet south of Westminster Street.

Analysis of Potential Impacts:

The project primarily involves the excavation, removal and disposal of approximately 450 bcy of lead-impacted soils. Dust emissions from soil excavation and handling operations will be

controlled by water spraying and covering of stockpiles with plastic sheeting. The air upwind and downwind of the site will be monitored to ensure that PM₁₀ emissions from fugitive dust remain within the limits prescribed by SCAQMD. As shown in Item 3 (Air) above, vehicle exhaust emissions of CO, VOC, NO_x, SO_x, and PM₁₀ will not exceed SCAQMD limits.

The potential for exposure to lead-impacted soils during the removal action poses the greatest risk to onsite workers. The use of experienced personnel trained in working at hazardous waste sites, and conducting the work in accordance with approved methods and procedures, as prescribed in the Removal Action Work Plan and Health and Safety Plan, will greatly reduce the risk of any exposure.

The excavated soil will be classified for proper disposal based on stockpile sampling. All vehicles used by the project will be insured for liability and will be operated only by appropriately licensed operators in accordance with state law. Trucks used to transport inert materials to an offsite recycling/disposal facility will comply with all applicable state laws for transporters.

The soil is stable and not expected to ignite or cause an explosion. Adequate measures will be employed to prevent fugitive dust from being transported into nearby residential areas. As described in Item 6 (Geology and Soils) above, excavations will be sloped where necessary to prevent collapse and/or cave-in.

Prior to commencement of intrusive activities, station utility maps will be reviewed and a geophysical utility survey will be conducted to locate buried utilities. Active utilities present within the area to be excavated will be evaluated to determine if the utility should be left in place, temporarily or permanently rerouted around the site, or decommissioned and removed. Manual methods of excavation will be employed in the vicinity of active utilities to be left in place.

Although excavation and backfilling activities at SWMU 24 will temporarily disrupt the local environment, the site will be allowed to naturally revegetate and be restored to its original state in a relatively short period of time.

Public exposure to noise levels during the removal activity will not disrupt activities that are part of the daily human condition. Onsite workers will participate in a hearing conservation and protection program.

The project will not have a significant impact on the public health and safety from exposure to noise, fugitive dust or vehicle exhaust emissions, all of which are at or below federal and state guidelines.

All sensitive receptors are located more than a quarter mile away from the project site. J.H. McGaugh Elementary School is located approximately 1.7 mile southwest of SWMU 24 and the area approximately 1 mile southwest is used for military housing. SWMU 24 is not located on a site, which is included on a list of hazardous materials site compiled pursuant to Government Code Section 65962.5 and it would not create a significant hazard to the public or the environment.

Therefore the project will not:

- a. Create a significant hazard to the public or the environment throughout the routine transport, use or disposal of hazardous materials.
- b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

- c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school.
- d. Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and, as a result, would it create a significant hazard to public or the environment.
- e. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

References: 3

Findings of Significance:

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☒ Less Than Significant Impact
- ☐ No Impact

8. Hydrology and Water Quality

Project activities likely to create an impact:

- Excavate lead-impacted soil
- Remove lead-impacted soil
- Dispose of lead-impacted soil

Description of Environmental Setting:

The depth to groundwater at SWMU 24 is expected to be approximately 21 feet bgs (Ref 1). Drainage from NAVWPNSTA Seal Beach flows predominantly to Anaheim Bay with minor amounts discharged into the Bolsa Chica Flood Control Channel. Raised roadbeds serve as barriers to control tidal flooding at the facility. There are no watercourses or wetlands located in the immediate vicinity of SWMU 24.

Analytical results from two different sampling activities by Foster Wheeler and CH2M Hill indicated that some areas of the former facility contained elevated concentrations of metals. Analytical results for the samples collected by CH2M Hill were used in human-health and ecological screening risk assessments. Based on the human health risk screening, the risk from metals is considered acceptable. Based on the ecological risk screening, safe ecological preliminary remediation goals (PRGs) for most receptors are exceeded by the maximum concentrations of identified metals and by the arithmetic mean concentrations of lead. Lead was determined to be the primary risk contributor. However, lead-impacted soils were reported within the upper three feet of soil and groundwater is expected to be approximately 21 feet bgs.

References: 1 and 3.

Analysis of Potential Impacts:

Excavation of the lead-impacted soils at SWMU 24 will result in the removal of low levels of metals that could leach to groundwater underlying the site. Excavated soil will be stockpiled on and covered with plastic (minimum 20-millimeter thickness) until it is classified and removed for

disposal.

The project will not result in degradation of surface or groundwater quality, or depletion/ degradation of groundwater supplies. The excavation area will be backfilled with clean fill material to restore the affected area to a condition comparable with surrounding area conditions, and allowed to naturally revegetate. The project will not alter the course or flow of floodwaters, or the direction or rate of flow of groundwater.

Therefore the project will not:

- a. Violate any water quality standards or waste discharge requirements.
- b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficient in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).
- c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site.
- d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on or off-site.
- e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.
- f. Otherwise substantially degrade water quality.
- g. Place within a 100-flood hazard area structures, which would impede or redirect flood flows.
- h. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.
- i. Inundation by sieche, tsunami or mudflow.


In addition, the following are addressed to meet the requirements set forth under Section 711.4, Fish and Game Code and 753.5, Title 14, Code of California Regulations relating to filing of environmental fees:

- Changes to riparian land, rivers, streams, watercourses and wetlands under state and federal jurisdiction.
- Changes to any water resources, which will individually or cumulatively result in a loss of biological diversity among the plants and animals residing in that water.

References: 3

Findings of Significance:

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☐ Less Than Significant Impact

 No Impact

9. Land Use and Planning

Project activities likely to create an impact:

- Excavate lead-impacted soil
- Remove lead-impacted soil
- Dispose of lead-impacted soil

Description of Environmental Setting:

The former SDFF was located within SWMU 24. The SDFF was used primarily from 1985 to 1994 for the removal of explosive residue from expended munitions. After the SDFF was decommissioned in 1998, the structures were demolished and removed, the areas known to contain residual quantities of hazardous materials were decontaminated, and the site was graded.

The SDFF was developed for processing small munitions items (e.g., small arms ammunition, fuses, cartridge actuated devices), destroying the small quantity of reactive explosive or propellant that could not feasibly be recovered, while reclaiming the relatively large volume of valuable recyclable metals. During operation of the facility, the waste (kiln dust and sludge) was temporarily stored in 55-gallon, Department of Transportation-approved drums at the SDFF prior to disposal at a permitted off-station facility. An eight-foot chain-link fence equipped with three strands of barbed wire enclosed the entire site.

Currently, no buildings reside within SWMU 24, and station personnel rarely visit the area. Approximately 1.7 miles southwest of SWMU 24 is the J. H. McGaugh Elementary School, located on the westside of Seal Beach Boulevard between Bolsa Avenue and Marlin Avenue. The area approximately 1 mile southwest of SWMU 24 is used for military housing.

References: 1, 3, 8 and 9.

Analysis of Potential Impacts:

The project will not result in changes to the existing zoning, nor require deed restrictions or institutional controls. Following implementation of the proposed activity, land use at the site is not expected to change.

Therefore the project will not:

- a. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.
- b. Conflict with any applicable habitat conservation plan or natural community conservation plan.

References: 3

Findings of Significance:

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☐ Less Than Significant Impact
- ☒ No Impact

10. Mineral Resources

Project activities likely to create an impact:

- Excavate lead-impacted soil
- Remove lead-impacted soil
- Dispose of lead-impacted soil

Description of Environmental Setting:

The only natural resources the project activities will consume is the fuel needed to operate the excavation equipment and vehicles (trucks) that will be used to haul lead-impacted soils from the site. Fuel consumed by project equipment and vehicles consists primarily of diesel fuel (a petroleum product derived from the refining [distillation] of crude oil). Approximately 700 to 1,400 gallons of diesel fuel would be required for onsite excavation operations, and approximately 500 to 1,000 gallons of diesel fuel would be required for off-site transportation.

Analysis of Potential Impacts:

The potential for recovering natural resources, such as natural gas, crude oil, or minerals, does not exist at the site. The only natural resources that will be consumed by the project will be approximately 1,200 to 2,400 gallons of diesel fuel. The project will not increase the rate of use, nor contribute to depletion of any natural resources in any substantial way.

Therefore the project will not:

- a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

References:

Findings of Significance:

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☐ Less Than Significant Impact
- ☒ No Impact

11. Noise

Project activities likely to create an impact:

- Excavate lead-impacted soil

- Remove lead-impacted soil
- Dispose of lead-impacted soil

Description of Environmental Setting:

The closest occupied area, approximately 1 mile southwest of SWMU 24, is used for military housing. Approximately 1.7 miles southwest of SWMU 24 is the J. H. McGaugh Elementary School, located on the west side of Seal Beach Boulevard between Bolsa Avenue and Marlin Avenue.

References: 3, 4, 5 and 11.

Analysis of Potential Impacts:

Construction equipment will include a diesel driven backhoe or an excavator, a front-end loader, and dump trucks. Excavation, stockpiling, loading and transport activities are expected to last approximately 4 to 6 weeks. The noisiest part of the project will involve the earthwork (clearing the site and excavating). The measured noise level for this type of work is typically in the range of 100 to 105 decibels (dB) at a distance of 1 meter from the noise source. Cal/OSHA regulations, Title 8, California Code of Regulations (CCR), Section 5096, limits workers exposed to 85 dB to an 8-hour work period. U. S. Environmental Protection Agency (USEPA) has identified a level of 55 dB as adequate to protect outdoor activities against interference and annoyance due to noise. This level will permit spoken conversation and other activities such as sleeping, working and recreation, which are part of the daily human condition.

The construction phase of the project will increase the ambient noise levels on and immediately adjacent to the site.

The expected noise level or sound pressure level (SPL) at a given distance from a noise source can be approximated using the following equation:

$$SPL_{\text{final}} = SPL_{\text{initial}} - 20 \log (\text{final distance}/\text{initial distance})$$

At the military housing located approximately 1 mile southwest of the site, maximum noise levels are estimated to be approximately 41 dB, below the USEPA guideline for preventing activity interference and annoyance outdoors.

Noise monitoring will be conducted at SWMU 24 during construction activities. Workers will be required to wear hearing protection when noise levels from operating equipment exceed 85 dB.

Therefore the project will not:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- Exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels.
- A substantial permanent increase in ambient noise levels in the vicinity above levels existing without the project.
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

References:

Findings of Significance:

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☒ Less Than Significant Impact
- ☐ No Impact

12. Population and Housing

Project activities likely to create an impact:

- Excavate lead-impacted soil
- Remove lead-impacted soil
- Dispose of lead-impacted soil

Description of Environmental Setting:

The site is located within 1 mile of military housing for NAVWPNSTA Seal Beach and 1.7 miles from the J. H. McGaugh Elementary School. The Station work force and associated housing is governed by the defense mission assigned to the Station by DoD.

References: 1 and 3.

Analysis of Potential Impacts:

The project will have no impact on the population, or housing of the surrounding area. The population of NAVWPNSTA Seal Beach is determined by the staffing needs of the defense missions assigned to the Station. There are no recreational uses of SWMU 24. The project will not alter the location, distribution, density or growth rate of the human population, nor affect existing housing, nor create a demand for additional housing.

Therefore the project will not:

- a. Induce substantial population growth in area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
- b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

References:

Findings of Significance:

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☐ Less Than Significant Impact
- ☒ No Impact

13. Public Services

Project activities likely to create an impact:

- Excavate lead-impacted soil
- Remove lead-impacted soil
- Dispose of lead-impacted soil

Description of Environmental Setting:

The need for public services is dependent on the local population. The work force at NAVWPNSTA Seal Beach, and hence the population in the surrounding areas, is dependent on the strategic policies of the Department of Defense (DoD), the defense missions assigned to military bases, and the level of staffing needed to carry out the missions assigned to a particular base. The public services surrounding NAVWPNSTA Seal Beach include: J. H. McGaugh Elementary School, Long Beach Community Hospital, Los Alamitos Medical Center, Seal Beach Police Station, and Seal Beach Fire Department.

References: 10.

Analysis of Potential Impacts:

Since the project will not increase the permanent work force at NAVWPNSTA Seal Beach, or affect the population in the surrounding area, public services such as fire and police protection, schools, roads, hospitals and other medical facilities will not be impacted. The number of project personnel involved in the project may range from 8 to 12 persons during the field activities for a period of approximately 1.5 months. Since the project field activities will last for a relatively short duration and will involve a small number of personnel, the impacts on public services will be insignificant.

Therefore the project will not:

- a. Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:
 - Fire protection
 - Police protection
 - Schools
 - Parks
 - Other public facilities

References:

Findings of Significance:

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☐ Less Than Significant Impact
- ☒ No Impact

14. Recreation

Project activities likely to create an impact:

- Excavate lead-impacted soil
- Remove lead-impacted soil
- Dispose of lead-impacted soil

Description of Environmental Setting:

The project site is located on a military base and is not available of recreational activities.

Analysis of Potential Impacts:

The project will not impact the quality or quantity of existing recreational opportunities in the surrounding areas.

Therefore the project will not:

- a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- b. Include recreational facilities or require construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

References:

Findings of Significance:

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☐ Less Than Significant Impact
- ☒ No Impact

15. Transportation and Traffic

Project activities likely to create an impact:

- Excavate lead-impacted soil
- Remove lead-impacted soil
- Dispose of lead-impacted soil

Description of Environmental Setting:

The majority of vehicular traffic entering and exiting NAVWPNSTA Seal Beach is from Westminster Boulevard through Gate 9 (Contractor's Gate). This gate is controlled by a traffic signal. Approximately 500 vehicles per day enter and exit the Station through Gate 9. Westminster Boulevard is a four-lane east-west thoroughfare that divides the Station into northern and southern sections. It intersects Seal Beach Boulevard, which is a six-lane north-south thoroughfare that defines the western boundary of the Station, and provides access to and from Interstate Highway 405 (San Diego Freeway) to the north.

Construction personnel and equipment required for the project will enter and exit the Station through Gate 9. SWMU 24 is located in the explosive storage area approximately 330 feet south of Westminster Street and east of Building 95, approximately 2,300 feet southeast of Gate 9. Access to the site from Gate 9 is along Kitts Highway, Westminster Street and the access road. Pedestrian traffic on these streets is negligible. The posted speed limit is 40 mph on Kitts Highway and 25 mph on Westminster Street and the access road. There are no other traffic restrictions on these roadways.

References: 3 and 10.

Analysis of Potential Impacts:

Trucks hauling contaminated waste material for off-site disposal will use Gate 9 located on Westminster Avenue to exit the NAVWPNSTA. The trucks will travel east on Westminster Avenue to Bolsa Chica Road, then go north on Bolsa Chica Road to enter Interstate 405. Trucks hauling contaminated waste material for off-site disposal will not be allowed to travel on Seal Beach Boulevard.

Assuming an approximately 10-day transportation period, the total truckloads per day, for hauling contaminated waste material off-site for disposal, is estimated to be 2. The truckloads for bringing burrow to the site is expected to be approximately 2 per day. However, both activities will have separate timelines. Therefore, the impact will not be cumulative. Vehicular traffic to and from NAVWPNSTA Seal Beach Gate 9 is estimated to increase by 3 percent for 10 days. Therefore, the increase in flow of traffic on and off the NAVWPNSTA Seal Beach is not expected to be significant. No impact is anticipated on the vehicular and pedestrian traffic patterns on Forrestal Avenue, and Kitts Highway.

Therefore the project will not:

- a. Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).
- b. Exceed, either individually or cumulatively, a level of service standard established by the country congestion management agency for designated roads or highway.
- c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- d. Result in inadequate emergency access.
- e. Result in inadequate parking capacity.

- f. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

References:

Findings of Significance:

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☐ Less Than Significant Impact
- ☒ No Impact

16. Utilities and Service Systems

Project activities likely to create an impact:

- Excavate lead-impacted soil
- Remove lead-impacted soil
- Dispose of lead-impacted soil

Description of Environmental Setting:

NAVWPNSTA Seal Beach has an existing water supply system and electrical power.

Analysis of Potential Impacts:

Utilities for the project will include electricity, potable water, and telephone services, all of which are currently available at NAVWPNSTA Seal Beach. The project does not anticipate the need to utilize the sanitary/industrial sewers or storm drainage systems.

During the construction phase of the project, the main demand for energy will be from excavation equipment and vehicles (trucks). As discussed in Item 10 (Mineral Resources) above, this demand will be satisfied by diesel fuel. Electrical power requirements for an on-site construction trailer will be provided by Southern California Edison (SCE) through the existing power supply system that provides electrical power to NAVWPNSTA Seal Beach.

Prior to commencement of intrusive activities, station utility maps will be reviewed and a geophysical utility survey will be conducted to locate buried utilities. Active utilities present within the area to be excavated will be evaluated to determine if the utility should be left in place, temporarily or permanently rerouted around the site, or decommissioned and removed. Manual methods of excavation will be employed in the vicinity of active utilities to be left in place.

The construction phase of the project does not involve, address, nor result in the need for a substantial amount of energy. The project will only involve short duration field activities. This will be the only period during which energy will be consumed. No power shut downs are anticipated in the nearby buildings as a result of project activities. If necessary, a field construction trailer will be mobilized near the site to serve as a field office. Power to the trailer will be provided from the existing Station electrical distribution system. All vehicles will run on diesel fuel.

The existing Station water supply will be adequate to provide the water needs of the project, which are estimated to be approximately 1,000 to 2,000 gallons. The project is not expected to

impact the sanitary/industrial sewers or storm drainage systems. Review of existing underground utility maps, performing a geophysical utility survey, and manually excavating in the vicinity of active utilities will prevent the inadvertent disruption of utility services and adequately protect the health and safety of workers in and around the site.

Therefore the project will not:

- a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.
- e. Result in determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments.
- f. Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs.
- g. Comply with federal, state, and local statutes and regulations related to solid waste.

References:

Findings of Significance:

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☒ Less Than Significant Impact
- ☐ No Impact

17. Cumulative Effects

Project activities likely to create an impact:

- Excavate lead-impacted soil
- Remove lead-impacted soil
- Dispose of lead-impacted soil

Description of Environmental Setting:

The IR Program is the DoD program for conducting environmental investigations and remediation of sites contaminated by the release of hazardous substances in accordance with CERCLA. Since 1994, the Navy has completed five removal actions at NAVWPNSTA Seal Beach, one at

each of the following IR Sites: Site 1 (Waste Settling Pond), Site 8 (Battery Shop Drainage), Site 9 (Sandblast Grit Disposal), Site 19 (Building 241 Disposal Pit), and Site 20 (Building 68 Mercury Spill). A removal action is currently occurring at IR Site 5 (Clean Fill Disposal Area). In addition to SWMU 24 (Stationary Demilitarization Furnace Facility), removal actions are planned at IR Site 7 (Station Landfill) and IR Site 73 (Water Tower Area).

Analysis of Potential Impacts:

This project will be accomplished with conventional technologies such as backhoes and dump trucks. As such, it will have no impact on the need for development of new technologies.

This project is not part of a larger project nor will it lead to a series of projects. However, environmental investigations and removal actions will be conducted at other NAVWPNSTA Seal Beach sites under the IR Program in the future. The IR Program is designed to provide a framework for investigating and cleaning up contaminated sites at NAVWPNSTA Seal Beach. The other removal actions are not planned concurrently with the SWMU 24 removal action. This will eliminate the cumulative impacts on noise, air, and traffic, and avoid cumulative impacts on public services, utilities, and energy.

Therefore the project will not:

- a. Increase the need for developing new technologies, especially for managing any hazardous or non-hazardous wastes that the project generates.
- b. Increase the need for developing new technologies for any other aspects of the projects.
- c. Leads to a larger project or leads to a series of projects, or is a step to additional projects. Examples of DTSC projects include Interim Corrective Measures and Removal Actions that are not final remedies for a site or facility.
- d. Alters the location, distribution, density or growth rate of the human population of an area.
- e. Affect existing housing, public services, public infrastructure, or creates demands for additional housing.
- f. Be cumulatively considerable on the environments with cumulative adverse effects on air, water, habitats, natural resources, etc.

References:

Findings of Significance:

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☒ Less Than Significant Impact
- ☐ No Impact

18. Mandatory Findings of Significance

Project activities likely to create an impact:

- Excavate lead-impacted soil

- Remove lead-impacted soil
- Dispose of lead-impacted soil

Therefore the project will not:

- Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

The Cultural Resources Section and Biological Resources Section of this Initial Study support this determination.

- Have impacts that are individually limited but cumulatively considerable. As used in the subsection, "cumulatively considerable".

The Cumulative Effects Section of this Initial Study supports this determination.

["Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects]

- Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

The Hazards and Hazardous Materials Section and the Population and Housing Section of this Initial Study supports this determination.

References:

Findings of Significance:

- ☐ Potentially Significant Impact
- ☐ Potentially Significant Unless Mitigated
- ☒ Less Than Significant Impact
- ☐ No Impact

V. DETERMINATION OF DE MINIMIS IMPACT FINDING

On the basis of this Special Initial Study:

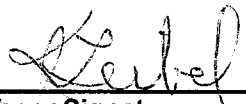

- ☒ I find that there is no evidence before the Department of Toxic Substances Control that the proposed project will have a potential for an adverse effect on wildlife resources or the habitat upon which the wildlife depend. A Negative Declaration with a De Minimis Impact Finding will be prepared.

VI. DETERMINATION OF APPROPRIATE ENVIRONMENTAL DOCUMENT

On the basis of this Special Initial Study:

- ☒ I find that the proposed project COULD NOT have a significant effect on the environment. A NEGATIVE DECLARATION will be prepared.

- ☐ I find that although the proposed project COULD HAVE a significant effect on the environment, mitigation measures have been added to the project, which would reduce these effects to less than significant levels. A NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project COULD HAVE a significant effect on the environment. An ENVIRONMENTAL IMPACT REPORT will be prepared.

		HSS	714-484-5446	9/3/02
DTSC Project Manager Signature	DTSC Branch/ Unit Chief Signature	Title	Telephone #	Date

ATTACHMENT A

SPECIAL
INITIAL STUDY
REFERENCE LIST

for

Action Memorandum/Removal Action Work Plan (AM/RAW)
for a Non-Time Critical Removal Action at
Solid Waste Management Unit 24 – Stationary Demilitarization Furnace
Naval Weapons Station Seal Beach
Seal Beach, Orange County, California

1. CH2M Hill. 2000. Draft Focused Site Inspection Phase II Report, Naval Weapons Station, Seal Beach, California. Volumes 1 and 2. 18 December.
2. Soil Conservation Service. 1978. Soil Survey of Orange County and Western Part of Riverside County, California. U.S. Department of Agriculture.
3. Bechtel National, Inc. 2001. Engineering Evaluation/Cost Analysis, Non-Time-Critical Removal Action for Solid Waste Management Unit 24, Naval Weapons Station Seal Beach, Seal Beach, Orange County, California. December.
4. California Code of Regulations (CCR), Title 8
5. Occupational Safety and Health Administration (OSHA) Regulations, 29 CFR
6. National Institute for Occupational Safety and Health (NIOSH). 1997. Pocket Guide to Chemical Hazards. June.
7. SCAQMD CEQA Handbook, Table 9-9-G.
8. A.T. Kearney, Inc. 1989. Seal Beach Naval Weapons Station Seal Beach, California RCRA Facility Assessment Report. March.
9. Foster-Wheeler. 1999. Draft Project Closure Report, Decommissioning of Stationary Demilitarization Furnace Facility, Naval Weapons Station, Seal Beach, Seal Beach, California. 12 January.
10. Bechtel National, Inc. (BNI). 2001. Final Engineering Evaluation/Cost Analysis, Non-Time Critical Removal Action for Installation Restoration Site 5, Naval Weapons Station Seal Beach, Seal Beach, Orange County, California. August.
11. U. S. Environmental Protection Agency (USEPA), Office of Noise Abatement and Control. 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare With an Adequate Margin of Safety. 550/9-74-004. March.
12. Department of the Navy. 1999. Letter to State Historic Preservation Officer proposing a project to collect soil and groundwater samples at past contamination sites at Naval Weapons Station Seal Beach; including a comparison of areas of potential effect with know archaeological sites. December 28.
13. Department of the Navy. 2000. Letter signed by State Historic Preservation Officer showing agreed upon determination for collecting soil and groundwater samples at past contamination

sites at Naval Weapons Station Seal Beach. February 1.

14. RMW Paleo Associates, Incorporated. 2000. Archaeological Services at Naval Weapons Station (NAVWPNSTA), Seal Beach, California (CH2M Hill Prime Contract No. N6871-96-D-2299), Relative to Sampling at Installation Restoration (IR) Sites 12, 16, 25, 37, 38, 42, 44/45, AOC 6, SWMU 24, 56, 57, OSR, and Building 128. May.
15. Jacobs Engineering Group, Inc. 1995. Draft Final Site Inspection Report for Operable Units 6 and 7, Naval Weapons Station, Seal Beach, California. Revision 0. 14 July.

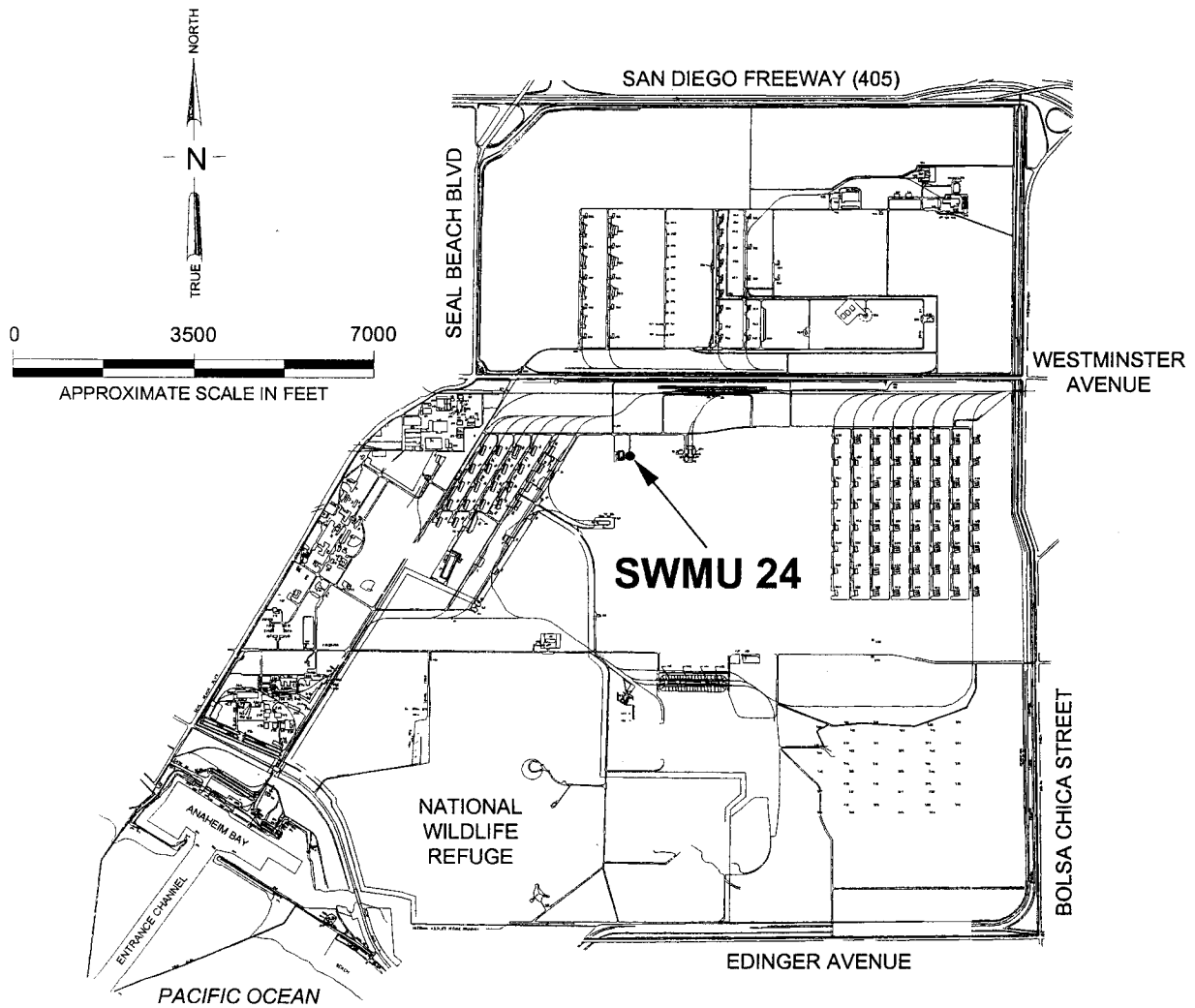


Figure 1
Site Location Map

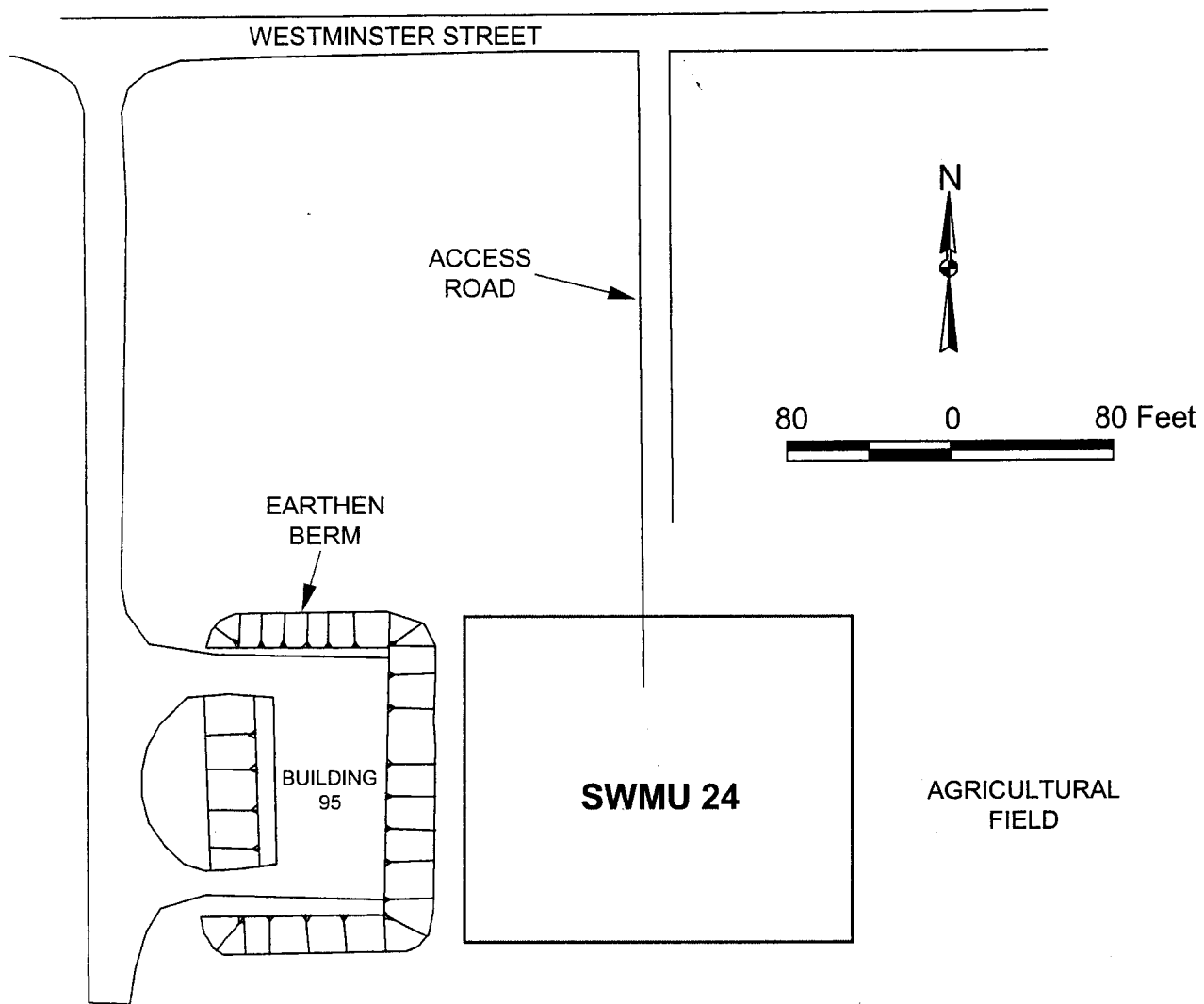


Figure 2
SWMU 24 Base Map

